



In re Application of:
Reimer, et al.

Serial No.: 09/220,153

Confirmation No.: Unknown

Filed: December 23, 1998

**For: Processing Apparatus
 Having Integrated
 Pumping System**

Group Art Unit: 1763

Examiner: R. Bueker

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

CERTIFICATE OF MAILING
37 CFR 1.8

I hereby certify that this correspondence is being deposited on
28 Feb 02 with the United States Postal Service as
First Class Mail in an envelope addressed to: Assistant
Commissioner for Patents, Washington, D.C. 20231.

28 Feb 02 William A. Patten
Date Signature

RESPONSE TO OFFICE ACTION DATED AUGUST 30, 2001

In response to the Office Action dated August 30, 2001, having a shortened statutory period for response set to expire on November 30, 2001, please enter the following amendments and reconsider the claims pending in the application for reasons discussed below. The Commissioner is authorized to charge Deposit Account No. 20-0782/APPM/2981/CPES/EPs/WBP, along with any other fees to make this response timely.

IN THE CLAIMS:

Please enter the following new claims:

102. An apparatus for processing a substrate, the apparatus comprising:
a chamber; and
a pump adjacent to the chamber, the pump having an inlet connected to the chamber to evacuate gas in the chamber and an outlet that exhausts the evacuated gas

to atmospheric pressure, the apparatus further comprising a pressure controller to control the pressure of the gas in the chamber by adjusting a speed of the pump.

103. An apparatus for processing a substrate, the apparatus comprising:

a load-lock chamber comprising an enclosure; and

a pump adjacent the load-lock chamber, the pump having an inlet connected to the load-lock chamber to evacuate gas from the load-lock chamber and an outlet that exhausts the gas to atmospheric pressure, the apparatus further including a pressure controller to control the pressure of the gas in the load-lock chamber by adjusting a speed of the pump.

104. An apparatus for processing a substrate, the apparatus comprising:

a process chamber comprising a support and a gas distributor; and

a pump system comprising a pre-vacuum pump adjacent to the process chamber, the pre-vacuum pump having an inlet connected to the process chamber to evacuate gas from the process chamber and an outlet that exhausts the evacuated process gas to atmospheric pressure, whereby a substrate held on the support is processed by process gas introduced through the gas distributor into the process chamber, the apparatus further including a pressure controller to control the pressure of the processed gas in the process chamber by adjusting a speed of the pre-vacuum pump.

105. An apparatus for processing a substrate, the apparatus comprising:

a chamber capable of holding a substrate and processing the substrate in a gas;
and

a pump having an inlet connected to the chamber via a foreline for evacuating gas in the chamber, the foreline having an internal surface area of less than about 0.4 m² for a length of about 3 meters, the pump having an outlet that exhausts the evacuated gas to atmospheric pressure, the apparatus further including a pump controller adapted to control a rate of evacuation of the gas in the chamber by changing a speed of the pump.

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